

ABSTRACT

Disclosed is a variable gain amplifier having low voltage, low distortion, high linearity and wideband operating characteristics. The variable gain amplifier comprises an input signal provision and variable gain controller for receiving first and second input signals via a differential pair of a cascode shape and amplifying a difference signal of the first and second input signals to output first and second differential signals, wherein the controller controls a variable voltage gain of the difference signal according to a gain control voltage signal, and a current/voltage converter for receiving the first and second differential signals outputted from the input signal provision and variable gain controller and converting the first and second differential signals into first and second output voltages of a voltage inputted type depending on first and second bias voltages, wherein the input signal provision and variable gain controller has a construction of a current inputted type or a voltage inputted type along with negative feedback connection.